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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/696,416	10/28/2003	Sanjay Verma	3222-5	5357
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MARGER JOHNSON & MCCOLLOM, P.C.			PYO, MONICA M	
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101121110,			2161	
			DATE MAILED: 11/30/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/696,416	VERMA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Monica M. Pyo	2161				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•					
1) Responsive to communication(s) filed on 07 Se	eptember 2006.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-21</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-21</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Pener No(s) (Mail Date						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

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#### **DETAILED ACTION**

- 1. This communication is responsive to the Amendment filed 9/7/2006.
- 2. Claims 1-21 are currently pending in this application. Claims 1, 5, 10, 14 and 18 are independent claims. In the Amendment filed 9/7/2006, claims 9-21 are newly added and claims 2, 6 and 8 are amended. This action is made Final.

### Declaration under Rule 37 C.F.R.§ 1.31 Affidavits

3. The affidavit filed on 9/7/2006 under 37 CFR § 1.131 has been considered but is ineffective to overcome the U.S. Patent Application Publication No. 2004/0205066 (by Bhattacharjee et al.) reference.

### 4. From MPEP § 715.04[R-5]:

The following parties may make an affidavit or declaration under 37 CFR 1.131:

- (A) All the inventors of the subject matter claimed.
- (B) An affidavit or declaration by less than all named inventors of an application is accepted where it is shown that less than all named inventors of an application invented the subject matter of the claim or claims under rejection. For example, one of two joint inventors is accepted where it is shown that one of the joint inventors is the sole inventor of the claim or claims under rejection.
- (C) If a petition under 37 CFR 1.47 was granted or the application was accepted under 37 CFR 1.42 or 1.43, the affidavit or declaration may be signed by the 37 CFR 1.47 applicant or the legal representative, where appropriate.
- (D) The assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor. Ex parte Foster, 1903 C.D. 213,

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105 O.G. 261 (Comm'r Pat. 1903).

Affidavits or declarations to overcome a rejection of a claim or claims must be made by the inventor or inventors of the subject matter of the rejected claim(s), a party qualified under 37 CFR 1.42, 1.43, or 1.47, or the assignee or other party in interest when it is not possible to produce the affidavit or declaration of the inventor(s). Thus, where all of the named inventors of a pending application are not inventors of every claim of the application, any affidavit under 37 CFR 1.131 could be signed by only the inventor(s) of the subject matter of the rejected claims.

- 5. The declarations were not signed by all the co-inventors and a petition under 37 CFR 1.47 in this applicant was not granted.
- 6. In the interest of compact prosecution, the Examiner has considered the content of the declarations below:

"In general, proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose. However, "there are some devices so simple that a mere construction of them is all that is necessary to constitute reduction to practice." In re Asahi/America Inc., \*\*>68 F.3d 442, 37 USPQ2d 1204, 1206< (Fed. Cir. 1995) (Citing Newkirk v. \*>Lulejian<, 825 F.2d 1581, 3USPQ2d 1793 (Fed. Cir. 1987) and Sachs v. Wadsworth, 48 F.2d 928, 929, 9 USPQ 252, 253 (CCPA 1931).

The claimed restraint coupling held to be so simple a device that mere construction of it was sufficient to constitute reduction to practice. Photographs, coupled with articles and a technical report describing the coupling in detail were sufficient to show reduction to practice.)" (MPEP 715.07 III)

"For an actual reduction to practice, the invention must have been sufficiently tested to demonstrate that it will work for its intended purpose, but it need not be in a commercially satisfactory stage of development. If a device is so simple, and its purpose and efficacy so obvious, construction alone is sufficient to demonstrate workability. King Instrument Corp. v. Otari Corp., 767 F.2d 853, 860, 226 USPO 402, 407 (Fed. Cir. 1985). For additional cases pertaining to the requirements necessary to establish actual reduction to practice see DSL Dynamic Sciences, Ltd. v. Union Switch & Signal, Inc., 928 F.2d 1122, 1126, 18 USPQ2d 1152, 1155 (Fed. Cir. 1991) ("events occurring after an alleged actual reduction to practice can call into question whether reduction to practice has in fact occurred"); Corona v. Dovan, 273 U.S. 692, 1928 C.D. 252 (1928) ("A process is reduced to practice when it is successfully performed. A machine is reduced to practice when it is assembled, adjusted and used. A manufacture [i.e., article of manufacture] is reduced to practice when it is completely manufactured. A composition of matter is reduced to practice when it is completely composed." 1928 C.D. at 262-263 (emphasis added).); Fitzgerald v. Arbib, 268 F.2d 763, 765-66, 122 USPQ 530, 531-32 (CCPA 1959) ("the reduction to practice of a three-dimensional design invention requires the production of an article embodying that design" in "other than a mere drawing")" (MPEP 2138.05).

7. Exhibit A, submitted as a written description, does not constitute an actual reduction to practice. Furthermore, Exhibits B and C also fail to establish that they reduced to practice working model. A written description, no matter how complete, which has not been made the subject of a US patent application, does not qualify as reduction to practice. Accordingly, Applicants have not established prior invention. The rejection is maintained.

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### Claim Rejections - 35 USC § 112

8. The claim amendment received on 9/7/2006. The changes are acknowledged and therefore, the 35 U.S.C. 112, 2<sup>nd</sup> rejections made in a prior Office Action are withdrawn.

## Specification

9. The disclosure is objected to because of the following informalities:

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claims 2, 6, 13, 17 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2, 6, 13, 17 and 21, these claims recite the limitation "sort". There is insufficient antecedent basis for this limitation in the claim.

### Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 11. Claims 1, 4-5 and 8 are rejected under 35 U.S.C. 102(e) as being obvious by U.S. Patent Application Publication No. 2004/0205066 by Bhattacharjee et al. (hereafter Bhattacharjee).

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Regarding Claims 1 and 5, Bhattacharjee discloses a database management system, comprising:

a processor associating lock durations with different activities in a transaction and maintaining locks for the duration of the activities and then releasing the locks when the activities are completed, as the lock duration is shared by transactions and the lock duration may be incremented or decremented by a transaction (Bhattacharjee: pg. 5, [0062]; pg. 11, [0146-0147]; fig. 1)

Regarding Claims 4 and 8, Bhattacharjee disclose the system wherein the processor associates the activities with lock modes and releases the lock modes on data items when the associated activities are finished (Bhattacharjee: pg. 5, table 1; pg. 6, [081]).

#### Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhattacharjee as applied to claims 1, 4-5 and 8 above, and further in view of U.S. Patent No. 5,497,483 issued to Beardsley et al. (hereafter Beardsley).

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Regarding Claim 3, Bhattacharjee disclose the system including individual activities for the transaction, the processor assigning activity identifiers to the activities (Bhattacharjee: pg. 5, table 1, [0066-0067]; pg. 6, table 2; pg. 8, [0100]).

Bhattacharjee does not disclose: memory containing a bit map that tracks activities.

However, Beardsley disclose: memory containing a bit map that tracks activities and (Beardsley: col. 10, lns. 7-18; fig. 9).

It would have been obvious to a person with ordinary skill in the art at the time of invention to combine the setting a bit map of Beardsley into the locking database of Bhattacharjee. Skilled artisan would have been motivated to incorporate the Beardsley's teaching of using a bit map setting in the Bhattacharjee's teaching of multi-level locking database system to utilize controlling a track transfers (Beardsley: col. 9, lns. 53-66).

14. Claims 2, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhattacharjee as applied to claims 1, 4-5 and 8 above, in view of U.S. Patent Application Publication No. 2004/0220933 by Walker (hereinafter Walker).

Regarding Claims 2 and 6, Bhattacharjee discloses the system wherein one of the activities include individual sort operations and the processor activates locks for each of the individual sort operations in the group and releases the locks only when the all of the individual sort operations in the group are completed (Bhattacharjee: pg. 5, [0061-0062]).

Bhattacharjee does not explicitly disclose: a group of

However, Walker discloses: a group of, as different transaction group types (Walker: pg. 4, table 2).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the managing locks and transactions of Walker in the multi-level locking system of Bhattacharjee. Skilled artisan would have been motivated to incorporate the Walker's teaching of different transaction types of groupings in the Bhattacharjee's teaching of releasing locks when the operations are completed to utilize the transaction types of groupings (Walker: pg. 2, [0041]).

Regarding claim 9, Bhattacharjee discloses the method including:

preventing other transactions and other associated activities from accessing the multiple data items until all of the multiple operations are completed for all of the database access instructions assigned to the activity identifier (Bhattacharjee: pg. 5, [0062]).

Bhattacharjee does not explicitly disclose:

assigning a same unique activity identifier to multiple different arbitrary database access instructions that constitute the different activities in the transaction, the database access instructions performing one or more operations on multiple data items in a database and the activity identifier assigned to and associated with the database access instructions independently of any relationship that may exist between the multiple data items in the database accessed by the database access instructions.

assigning multiple locks to the multiple data items corresponding with the operations performed on the multiple data items pursuant to the database access instructions

Walker disclose:

assigning a same unique activity identifier to multiple different arbitrary database access instructions that constitute the different activities in the transaction, the database access instructions performing one or more operations on multiple data items in a database and the activity identifier assigned to and associated with the database access instructions independently of any relationship that may exist between the multiple data items in the database accessed by the database access instructions (Walker: pg. 5, [0079]; pg. 6, [0098, 0102]; pg. 9, [0133]);

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assigning multiple locks to the multiple data items corresponding with the operations performed on the multiple data items pursuant to the database access instructions (Walker: pg. 5, [0079]; pg. 6, [0098]; pg. 7, [0105, 0108]; pg. 13, [0210]); and

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the managing locks and transactions of Walker in the multi-level locking system of Bhattacharjee. Skilled artisan would have been motivated to incorporate the Walker's teaching of different transaction types of groupings in the Bhattacharjee's teaching of releasing locks when the operations are completed to utilize the transaction types of groupings (Walker: pg. 2, [0041]).

15. Claims 10-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of Bhattacharjee.

Regarding claims 10, 14 and 18, Walker discloses a database management system, comprising:

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- A). a processor configured to assign activity identifiers to database access instructions that perform one or more operations on multiple data items in a database, the activity identifiers assigned to and associated with the database access instructions independently of any relationship that may exist between the multiple data items in the database accessed by the database access instructions, as the transaction manager generates a unique operation Ids and (Walker: pg. 5, [0079]; pg. 6, [0098, 0102]; pg. 9, [0133]).
- B). the processor further configured to assign multiple locks to the multiple data items corresponding with the operations performed on the multiple data items pursuant to the database access instructions and further configured for all of the database access instructions assigned to the same activity identifiers, as a client operation is composed of multiple 'actions' and the AgentReleaseAll request to release all locks held by the operation (Walker: pg. 5, [0079]; pg. 6, [0098]; pg. 7, [0105, 0108]; pg. 13, [0210]).

Walker does not explicitly disclose:

B). to only release the multiple locks when all of the multiple operations are completed

However, Bhattacharjee discloses:

B). to only release the multiple locks when all of the multiple operations are completed, as no changes are allowed while being locked until the unit of work is complete (Bhattacharjee: pg. 5, [0062]).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the multi-level locking system of Bhattacharjee in the managing locks and transactions of Walker. Skilled artisan would have been motivated to incorporate the

Bhattacharjee's teaching of releasing locks when the operations are completed in the Walker's teaching of assigning multiple operation Ids and locks to utilize the method of releasing block locks (Bhattacharjee: pg. 2, [0017]).

Regarding claims 11, 15 and 19, Walker and Bhattacharjee disclose the system wherein the processor is further configured to assign the activity identifiers to an arbitrary group of related database access instructions performing operations on an arbitrarily related group of data items (Walker: pg. 6, [0098, 0102]) and (Bhattacharjee: pg. 3, [0040]).

Regarding claims 12, 16 and 20, Walker and Bhattacharjee disclose the system wherein the processor is further configured to assign common transaction identifiers to different related groups of database access instructions assigned different activity identifiers and coordinate when the different related groups of database access instructions are allowed to perform operations on the data items (Walker: pg. 4, [0070], table 2).

Regarding claims 13, 17 and 21, Walker and Bhattacharjee disclose the system wherein the processor is configured to assign a first transaction identifier to a group of individual sort operations and assign locks to the data items associated with the sort operations, the processor further configured to hold the locks until all of the individual sort operations in the group have been completed (Walker: pg. 4, [0070-0071], table 2) and (Bhattacharjee: pg. 5, [0062]).

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### Response to Arguments

16. Applicant's arguments filed 9/7/2006 have been fully considered but they are not persuasive. Applicants submitted the declarations under 37 CFR 1.131 to sear behind the Bhattacharjee reference. However, the declarations are not sufficient to overcome the Bhattacharjee reference for the reasons above in the *Declaration under Rule 37 C.F.R.§ 1.31 Affidavits*.

#### Conclusion

17. Applicant's amendment to claims 2, 6 and 9-21 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica M. Pyo whose telephone number is 571-272-8192. The examiner can normally be reached on Mon-Fri 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica M Pyo Examiner Art Unit 2161

11/24/2006 mp

HOSAIN ALAM